Amendments to and Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of fitting a cochlear implant, the cochlear implant having an electrode array with multiple electrode contacts through which a pulsatile stimulation waveform having a pulse rate and a pulse width may be applied to the cochlea of the patient; and wherein the fitting method builds an M iso-loudness contour and determines a T iso-loudness contour, the method comprising:

a) setting a starting sound level to build an iso-loudness contour;

b) setting volume on a first channel until the sound is at a predetermined level;

c) adjusting volume on a second channel until the volume of sound on the second channel is similar to the volume of sound on the first channel; then

d) setting the [second] next channel to result in the same sound volume determined for the previous channel [be the first channel]; [and]

e) repeating [(c) and] step (d) for each available channel until the stimulation level for the last channel is adjusted, and the M iso-loudness contour is built [.] ; and

f) picking one channel and determining the volume level of that one channel; and

g) generating a T-iso-loudness contour by determining the difference in the volume level measured for the one channel in step f) and the M volume level found previously for that channel and linearly shifting the M iso-loudness contour by the determined difference in volume level.

Claim 2 (Original): The method of Claim 1 wherein the starting sound level is no sound.

Claim 3 (Original):   The method of Claim 1 wherein the sound includes a tone or tones.

Claim 4 (Original):   The method of Claim 1 wherein the sound includes noise.

Claim 5 (Original):   The method of Claim 1 wherein the sound includes speech.

Claim 6 (Original):   The method of Claim 1 wherein the predetermined level is a comfortable level.

Claim 7 (Original):   The method of Claim 1 wherein the predetermined level is a threshold level.

Claim 8 (Original):   The method of Claim 1 wherein at least one channel is a virtual channel.

Claim 9 (Original):   The method of Claim 1 wherein at least one channel is skipped.

Claim 10 (Original):   A method of fitting a cochlear implant, the cochlear implant having an electrode array with multiple electrode contacts through which a pulsatile stimulation waveform having a pulse rate and a pulse width may be applied to the cochlea of the patient; and wherein the fitting method sets an iso-loudness contour from an iso-neural response contour, the method comprising:

determining an iso-neural response contour; and

linearly transposing the iso-neural contour to set an iso-loudness contour.

Claim 11 (Original): The method of Claim 10 further comprising using at least one of neural response imaging and evoked auditory brainstem response to determine the iso-neural response contour.

Claim 12 (Original): The method of Claim 10 further comprising

determining an M level for at least one channel;

determining a difference between the iso-neural level and the M level for the at least one channel; and

linearly transposing the iso-neural contour by the amount of the difference to set the iso-loudness contour.

Claim 13 (Original): The method of Claim 10 wherein the iso-loudness contour is an M iso-loudness contour.

Claim 14 (Original): The method of Claim 10 wherein the iso-loudness contour is a T iso-loudness contour.

Claim 15 (Original): A method of fitting a cochlear implant, the cochlear implant having an electrode array with multiple electrode contacts through which a pulsatile stimulation waveform having a pulse rate and a pulse width may be applied to the cochlea of the patient; and wherein the fitting method uses at least two iso-loudness contours, the method comprising:

determining a first iso-loudness response contour; and

linearly transposing the first iso-loudness contour to set a second iso-loudness contour.

Claim 16 (Original): The method of Claim 15 wherein the first iso-loudness contour is an M iso-loudness contour.

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Claim 17 (Original):   The method of Claim 16 wherein the second iso-loudness contour is a T iso-loudness contour.

Claim 18 (Original):   The method of Claim 15 further comprising:

determining a difference between the first iso-loudness contour level and the second iso-loudness contour using at least one channel; and

linearly transposing the first iso-loudness contour by the amount of the difference to set the second iso-loudness contour.

Claim 19 (Original):   A method of fitting a cochlear implant, the cochlear implant having an electrode array with multiple electrode contacts through which a pulsatile stimulation waveform having a pulse rate and a pulse width may be applied to the cochlea of the patient; and wherein the fitting method determines an iso-loudness contour, the method comprising:

setting pulse width to about 30 μs to about 75 μs;

determining an iso-loudness contour with the set pulse width; and

linearly transposing the iso-loudness contour for use with pulse widths of about 10 μs to about 20 μs.

Claim 20 (Original):   The method of Claim 19 further comprising:

determining a difference between the iso-loudness contour level with the set pulse width and a comfortable volume for pulse widths of about 10 μs to about 20 μs; and

linearly transposing the iso-loudness contour by the amount of the difference.

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